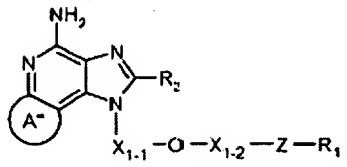
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the Application:

Listing of Claims

1. **(Canceled)**

2. **(Currently amended)** A compound of the Formula Ia:



Ia

wherein:

X_{1-1} and X_{1-2} are independently selected from the group consisting of C_{1-10} alkylene, C_{4-10} alkenylene, and C_{4-10} alkynylene; wherein the terminal carbon atoms of alkenylene and alkynylene are tetrahedral;

Z is selected from the group consisting of -S-, -S(O)-, and $-S(O)_2-$;

R_1 is selected from the group consisting of:

C_{1-10} alkyl,

C_{2-10} alkenyl,

C_{2-10} alkynyl,

aryl,

aryl-C_{1-10} alkylenyl,

aryloxy-C_{1-10} alkylenyl,

C_{1-10} alkylarylenyl,

heteroaryl,

heteroaryl-C_{1-10} alkylenyl,

heteroaryloxy-C_{1-10} alkylenyl,

C_{1-10} alkylheteroarylenyl,
heterocyclyl,
heterocyclyl-C_{1-10} alkylenyl, and
C_{1-10} alkyl, C_{2-10} alkenyl, C_{2-10} alkynyl, aryl, aryl-C_{1-10} alkylenyl,
aryloxy-C_{1-10} alkylenyl, C_{1-10} alkylarylenyl, heteroaryl,
heteroaryl-C_{1-10} alkylenyl, heteroaryloxy-C_{1-10} alkylenyl,
C_{1-10} alkylheteroarylenyl, heterocyclyl, and heterocyclyl-C_{1-10} alkylenyl
substituted by one or more substituents independently selected from the group
consisting of C_{1-10} alkyl, C_{1-10} alkoxy, hydroxy-C_{1-10} alkyl,
halo-C_{1-10} alkyl, halo-C_{1-10} alkoxy, halogen, nitro, hydroxy, cyano, aryl, aryloxy,
heteroaryl, heteroaryloxy, heterocyclyl, amino,
C_{1-10} alkylamino, di(C_{1-10} alkyl)amino, and in the case of C_{1-10} alkyl, C_{2-10} alkenyl,
C_{2-10} alkynyl, and heterocyclyl, oxo; wherein heteroaryl,
C_{1-10} alkylheteroarylenyl, and heterocyclyl are attached to Z through a carbon
atom;

A" is a fused benzene ring, ~~aryl ring or heteroaryl ring containing one heteroatom selected from the group consisting of N and S, wherein the aryl or heteroaryl ring~~ wherein the benzene ring is unsubstituted or substituted by one or more R groups, or

A" is a fused cyclohexene ring, wherein the ring is fully saturated except for the bond where the ring is fused, ~~5 to 7 membered saturated ring, optionally containing one heteroatom selected from the group consisting of N and S, and~~ wherein the cyclohexene ring is unsubstituted or substituted by one or more R_A groups;

each R is independently selected from the group consisting of alkyl, alkoxy, hydroxy, fluoro, and trifluoromethyl;

each R_A is independently selected from the group consisting of halogen, hydroxy, alkyl, alkenyl, haloalkyl, alkoxy, alkylthio, and -$N(R_9)_2$;

R_2 is selected from the group consisting of

-R_4,
-X-R_4,

-X-Y-R_4, and

-X-R_5;

X is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclylene wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated with arylene, heteroarylene, or heterocyclylene, and optionally interrupted by one or more -O- groups;

Y is selected from the group consisting of:

-O-,

-$S(O)_{0-2}$-,

-$S(O)_2$-$N(R_8)$-,

-$C(R_6)$-,

-$C(R_6)$-O-,

-O-$C(R_6)$-,

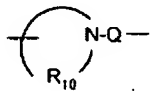
-O-C(O)-O-,

-$N(R_8)$-Q-,

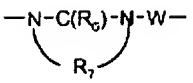
-$C(R_6)$-$N(R_8)$-,

-O-$C(R_6)$-$N(R_8)$-,

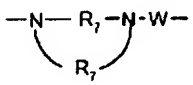
-$C(R_6)$-$N(OR_9)$-,



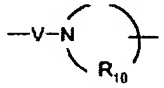
,



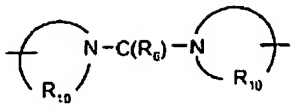
,



,



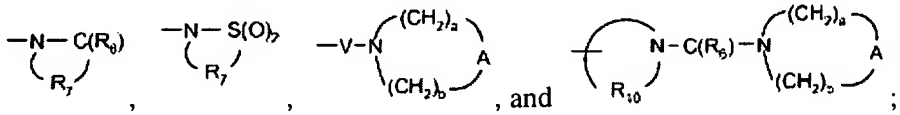
, and



;

R_4 is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylalkyleneoxy, heteroaryl, heteroaryloxy, heteroarylalkyleneoxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkyleneoxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

R_5 is selected from the group consisting of:



;

R_6 is selected from the group consisting of =O and =S;

R_7 is C_{2-7} alkylene;

R_8 is selected from the group consisting of hydrogen, alkyl, alkoxyalkylenyl, and arylalkylenyl;

R_9 is selected from the group consisting of hydrogen and alkyl;

R_{10} is C_{3-8} alkylene;

A is selected from the group consisting of -O-, -C(O)-, $-S(O)_{0-2}-$, $-CH_2-$, and $-N(R_4)-$;

Q is selected from the group consisting of a bond, $-C(R_6)-$, $-C(R_6)-C(R_6)-$, $-S(O)_2-$, $-C(R_6)-N(R_8)-W-$, $-S(O)_2-N(R_8)-$, $-C(R_6)-O-$, and $-C(R_6)-N(OR_9)-$;

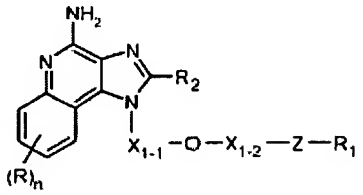
V is selected from the group consisting of $-C(R_6)-$, $-O-C(R_6)-$, $-N(R_8)-C(R_6)-$, and $-S(O)_2-$;

W is selected from the group consisting of a bond, -C(O)-, and $-S(O)_2-$; and

a and b are independently integers from 1 to 6 with the proviso that a + b is ≤ 7; or a pharmaceutically acceptable salt thereof.

3. **(Canceled)**

4. **(Original)** A compound of the Formula IIa:



IIa

wherein:

X_{1-1} and X_{1-2} are independently selected from the group consisting of C_{1-10} alkylene, C_{4-10} alkenylene, and C_{4-10} alkynylene; wherein the terminal carbon atoms of alkenylene and alkynylene are tetrahedral;

Z is selected from the group consisting of -S-, -S(O)-, and $-S(O)_2-$;

R_1 is selected from the group consisting of:

C_{1-10} alkyl,

C_{2-10} alkenyl,

C_{2-10} alkynyl,

aryl,

aryl-C_{1-10} alkylenyl,

aryloxy-C_{1-10} alkylenyl,

C_{1-10} alkylarylenyl,

heteroaryl,

heteroaryl-C_{1-10} alkylenyl,

heteroaryloxy-C_{1-10} alkylenyl,

C_{1-10} alkylheteroarylenyl,

heterocyclyl,

heterocyclyl-C_{1-10} alkylenyl, and

C_{1-10} alkyl, C_{2-10} alkenyl, C_{2-10} alkynyl, aryl, aryl-C_{1-10} alkylenyl, aryloxy-C_{1-10} alkylenyl, C_{1-10} alkylarylenyl, heteroaryl, heteroaryl-C_{1-10} alkylenyl, heteroaryloxy-C_{1-10} alkylenyl, C_{1-10} alkylheteroarylenyl, heterocyclyl, and heterocyclyl-C_{1-10} alkylenyl substituted by one or more substituents independently selected from the group consisting of C_{1-10} alkyl, C_{1-10} alkoxy, hydroxy-C_{1-10} alkyl, halo-C_{1-10} alkyl, halo-C_{1-10} alkoxy, halogen, nitro, hydroxy, cyano, aryl, aryloxy, heteroaryl, heteroaryloxy, heterocyclyl, amino, C_{1-10} alkylamino, di(C_{1-10} alkyl)amino, and in the case of C_{1-10} alkyl, C_{2-10} alkenyl, C_{2-10} alkynyl, and heterocyclyl, oxo; wherein heteroaryl, C_{1-10} alkylheteroarylenyl, and heterocyclyl are attached to Z through a carbon atom;

R is selected from the group consisting of alkyl, alkoxy, hydroxy, fluoro, and trifluoromethyl;

n is 0 to 4;

R_2 is selected from the group consisting of

-R_4,

-X-R_4,

-X-Y-R_4, and

-X-R_5;

X is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclylene wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated with arylene, heteroarylene, or heterocyclylene, and optionally interrupted by one or more -O- groups;

Y is selected from the group consisting of:

-O-,

-$S(O)_{0-2}$-,

-$S(O)_2$-$N(R_8)$-,

$-C(R_6)-$,

$-C(R_6)-O-$,

$-O-C(R_6)-$,

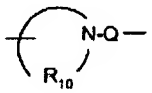
$-O-C(O)-O-$,

$-N(R_8)-Q-$,

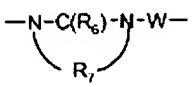
$-C(R_6)-N(R_8)-$,

$-O-C(R_6)-N(R_8)-$,

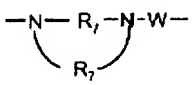
$-C(R_6)-N(OR_9)-$,



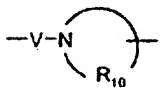
,



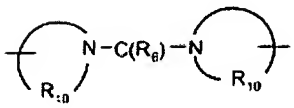
,



,



, and

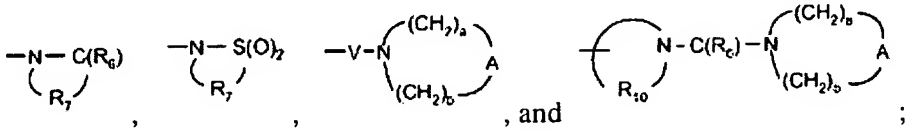


;

R_4 is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylalkyleneoxy, heteroaryl, heteroaryloxy, heteroarylalkyleneoxy, heterocyclyl, amino,

alkylamino, dialkylamino, (dialkylamino)alkyleneoxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

R_5 is selected from the group consisting of:



, , , and ;

R_6 is selected from the group consisting of =O and =S;

R_7 is C_{2-7} alkylene;

R_8 is selected from the group consisting of hydrogen, alkyl, alkoxyalkylenyl, and arylalkylenyl;

R_9 is selected from the group consisting of hydrogen and alkyl;

R_{10} is C_{3-8} alkylene;

A is selected from the group consisting of -O-, -C(O)-, $-S(O)_{0-2}-$, $-CH_2-$, and $-N(R_4)-$;

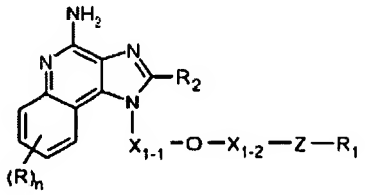
Q is selected from the group consisting of a bond, $-C(R_6)-$, $-C(R_6)-C(R_6)-$, $-S(O)_2-$, $-C(R_6)-N(R_8)-W-$, $-S(O)_2-N(R_8)-$, $-C(R_6)-O-$, and $-C(R_6)-N(OR_9)-$;

V is selected from the group consisting of $-C(R_6)-$, $-O-C(R_6)-$, $-N(R_8)-C(R_6)-$, and $-S(O)_2$;

W is selected from the group consisting of a bond, -C(O)-, and $-S(O)_2-$; and

a and b are independently integers from 1 to 6 with the proviso that a + b is ≤ 7; or a pharmaceutically acceptable salt thereof.

5. (**Original**) A compound of the Formula IIa:



IIa

wherein:

X_{1-1} and X_{1-2} are independently selected from the group consisting of

C_{1-10} alkylene, C_{4-10} alkenylene, and C_{4-10} alkynylene; wherein the terminal carbon atoms of alkenylene and alkynylene are tetrahedral;

Z is selected from the group consisting of -S-, -S(O)-, and -$S(O)_2$-;

R_1 is selected from the group consisting of:

C_{1-10} alkyl,

C_{2-10} alkenyl,

C_{2-10} alkynyl,

aryl,

aryl-C_{1-10} alkylenyl,

aryloxy-C_{1-10} alkylenyl,

C_{1-10} alkylarylenyl,

heteroaryl,

heteroaryl-C_{1-10} alkylenyl,

heteroaryloxy-C_{1-10} alkylenyl,

C_{1-10} alkylheteroarylenyl,

heterocyclyl,

heterocyclyl-C_{1-10} alkylenyl, and

C_{1-10} alkyl, C_{2-10} alkenyl, C_{2-10} alkynyl, aryl, aryl-C_{1-10} alkylenyl, aryloxy-C_{1-10} alkylenyl, C_{1-10} alkylarylenyl, heteroaryl, heteroaryl-C_{1-10} alkylenyl, heteroaryloxy-C_{1-10} alkylenyl, C_{1-10} alkylheteroarylenyl, heterocyclyl, and heterocyclyl-C_{1-10} alkylenyl substituted by one or more substituents independently selected from the group consisting of C_{1-10} alkyl, C_{1-10} alkoxy, hydroxy-C_{1-10} alkyl, halo-C_{1-10} alkyl, halo-C_{1-10} alkoxy, halogen, nitro, hydroxy, cyano, aryl, aryloxy, heteroaryl, heteroaryloxy, heterocyclyl, amino, C_{1-10} alkylamino, di(C_{1-10} alkyl)amino, and in the case of C_{1-10} alkyl, C_{2-10} alkenyl, C_{2-10} alkynyl, and heterocyclyl, oxo; wherein heteroaryl, C_{1-10} alkylheteroarylenyl, and heterocyclyl are attached to Z through a carbon atom;

R is selected from the group consisting of alkyl, alkoxy, hydroxy, fluoro, and trifluoromethyl;

n is 0 to 4;

R_2 is selected from the group consisting of

$-R_4$,

$-X-R_4$,

$-X-Y-R_4$, and

$-X-R_5$;

X is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclylene wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated with arylene, heteroarylene, or heterocyclylene, and optionally interrupted by one or more -O- groups;

Y is selected from the group consisting of:

$-S(O)_{0-2}-$,

$-S(O)_2-N(R_8)-$,

$-C(R_6)-$,

$-C(R_6)-O-$,

$-O-C(R_6)-$,

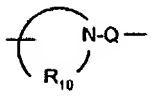
$-O-C(O)-O-$,

$-N(R_8)-Q-$,

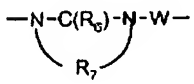
$-C(R_6)-N(R_8)-$,

$-O-C(R_6)-N(R_8)-$,

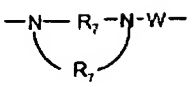
$-C(R_6)-N(OR_9)-$,

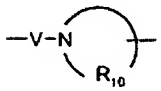


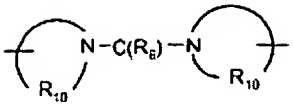
,



,

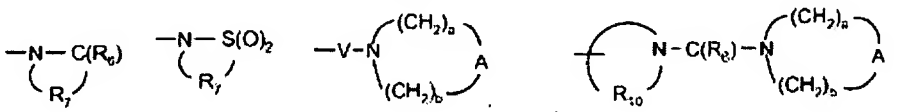

,


, and


;

R_4 is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylalkyleneoxy, heteroaryl, heteroaryloxy, heteroarylalkyleneoxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkyleneoxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

R_5 is selected from the group consisting of:


, , , and ;

R_6 is selected from the group consisting of =O and =S;

R_7 is C_{2-7} alkylene;

R_8 is selected from the group consisting of hydrogen, alkyl, alkoxyalkylenyl, and arylalkylenyl;

R_9 is selected from the group consisting of hydrogen and alkyl;

R_{10} is C_{3-8} alkylene;

A is selected from the group consisting of -O-, -C(O)-, $-S(O)_{0-2}-$, $-CH_2-$, and $-N(R_4)-$;

Q is selected from the group consisting of a bond, $-C(R_6)-$, $-C(R_6)-C(R_6)-$, $-S(O)_2-$, $-C(R_6)-N(R_8)-W-$, $-S(O)_2-N(R_8)-$, $-C(R_6)-O-$, and $-C(R_6)-N(OR_9)-$;

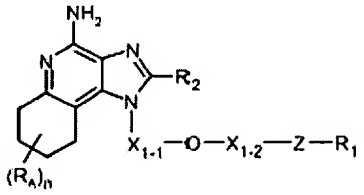
V is selected from the group consisting of $-C(R_6)-$, $-O-C(R_6)-$, $-N(R_8)-C(R_6)-$, and $-S(O)_2-$;

W is selected from the group consisting of a bond, $-C(O)-$, and $-S(O)_2-$; and

a and b are independently integers from 1 to 6 with the proviso that $a + b \leq 7$; or a pharmaceutically acceptable salt thereof.

6. **(Canceled)**

7. **(Currently amended)** A compound of the Formula ~~formula~~ IIIa:



IIIa

wherein:

X_{1-1} and X_{1-2} are independently selected from the group consisting of C_{1-10} alkylene, C_{4-10} alkenylene, and C_{4-10} alkynylene; wherein the terminal carbon atoms of alkenylene and alkynylene are tetrahedral;

Z is selected from the group consisting of -S-, -S(O)-, and $-S(O)_2-$;

R_1 is selected from the group consisting of:

C_{1-10} alkyl,

C_{2-10} alkenyl,

C_{2-10} alkynyl,

aryl,

aryl-C_{1-10} alkylenyl,

aryloxy-C_{1-10} alkylenyl,

C_{1-10} alkylarylenyl,

heteroaryl,

heteroaryl-C_{1-10} alkylenyl,

heteroaryloxy-C_{1-10} alkylenyl,

C_{1-10} alkylheteroarylenyl,

heterocyclyl,

heterocyclyl-C_{1-10} alkylenyl, and

C_{1-10} alkyl, C_{2-10} alkenyl, C_{2-10} alkynyl, aryl, aryl-C_{1-10} alkylenyl, aryloxy-C_{1-10} alkylenyl, C_{1-10} alkylarylenyl, heteroaryl, heteroaryl-C_{1-10} alkylenyl, heteroaryloxy-C_{1-10} alkylenyl, C_{1-10} alkylheteroarylenyl, heterocyclyl, and heterocyclyl-C_{1-10} alkylenyl substituted by one or more substituents independently selected from the group consisting of C_{1-10} alkyl, C_{1-10} alkoxy, hydroxy-C_{1-10} alkyl, halo-C_{1-10} alkyl, halo-C_{1-10} alkoxy, halogen, nitro, hydroxy, cyano, aryl, aryloxy, heteroaryl, heteroaryloxy, heterocyclyl, amino, C_{1-10} alkylamino, di(C_{1-10} alkyl)amino, and in the case of C_{1-10} alkyl, C_{2-10} alkenyl, C_{2-10} alkynyl, and heterocyclyl, oxo; wherein heteroaryl, C_{1-10} alkylheteroarylenyl, and heterocyclyl are attached to Z through a carbon atom;

R_A is selected from the group consisting of:

halogen,

hydroxy,

alkyl,

alkenyl,

haloalkyl,

alkoxy,

alkylthio, and

$-N(R_9)_2$;

n is 0 to 4;

R_2 is selected from the group consisting of

$-R_4$,

$-X-R_4$,

$-X-Y-R_4$, and

$-X-R_5$;

X is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclylene wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated with arylene, heteroarylene, or heterocyclylene, and optionally interrupted by one or more -O- groups;

Y is selected from the group consisting of:

-O-,

$-S(O)_{0-2}-$,

$-S(O)_2-N(R_8)-$,

$-C(R_6)-$,

$-C(R_6)-O-$,

$-O-C(R_6)-$,

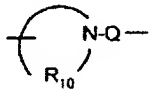
$-O-C(O)-O-$,

$-N(R_8)-Q-$,

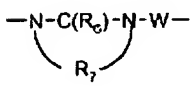
$-C(R_6)-N(R_8)-$,

$-O-C(R_6)-N(R_8)-$,

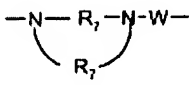
$-C(R_6)-N(OR_9)-$,



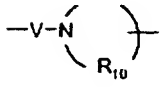
,



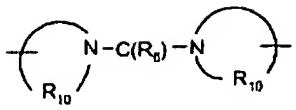
,



,

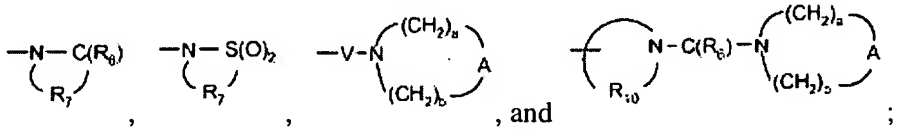


, and


;

R_4 is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylalkyleneoxy, heteroaryl, heteroaryloxy, heteroarylalkyleneoxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkyleneoxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

R_5 is selected from the group consisting of:


, and ;

R_6 is selected from the group consisting of =O and =S;

R_7 is C_{2-7} alkylene;

R_8 is selected from the group consisting of hydrogen, alkyl, alkoxyalkylenyl, and arylalkylenyl;

R_9 is selected from the group consisting of hydrogen and alkyl;

R_{10} is C_{3-8} alkylene;

A is selected from the group consisting of -O-, -C(O)-, $-S(O)_{0-2}-$, $-CH_2-$, and $-N(R_4)-$;

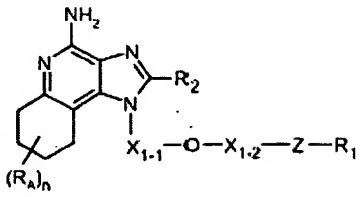
Q is selected from the group consisting of a bond, $-C(R_6)-$, $-C(R_6)-C(R_6)-$, $-S(O)_2-$, $-C(R_6)-N(R_8)-W-$, $-S(O)_2-N(R_8)-$, $-C(R_6)-O-$, and $-C(R_6)-N(OR_9)-$;

V is selected from the group consisting of $-C(R_6)-$, $-O-C(R_6)-$, $-N(R_8)-C(R_6)-$, and $-S(O)_2-$;

W is selected from the group consisting of a bond, -C(O)-, and $-S(O)_2-$; and

a and b are independently integers from 1 to 6 with the proviso that a + b is ≤ 7; or a pharmaceutically acceptable salt thereof.

8. **(Original)** A compound of the Formula IIIa:



IIIa

wherein:

X_{1-1} and X_{1-2} are independently selected from the group consisting of C_{1-10} alkylene, C_{4-10} alkenylene, and C_{4-10} alkynylene; wherein the terminal carbon atoms of alkenylene and alkynylene are tetrahedral;

Z is selected from the group consisting of -S-, -S(O)-, and $-S(O)_2-$;

R_1 is selected from the group consisting of:

C_{1-10} alkyl,

C_{2-10} alkenyl,

C_{2-10} alkynyl,

aryl,

aryl-C_{1-10} alkylenyl,

aryloxy-C_{1-10} alkylenyl,

C_{1-10} alkylarylenyl,

heteroaryl,

heteroaryl-C_{1-10} alkylenyl,

heteroaryloxy-C_{1-10} alkylenyl,

C_{1-10} alkylheteroarylenyl,

heterocyclyl,

heterocyclyl-C_{1-10} alkylenyl, and

C_{1-10} alkyl, C_{2-10} alkenyl, C_{2-10} alkynyl, aryl, aryl-C_{1-10} alkylenyl, aryloxy-C_{1-10} alkylenyl, C_{1-10} alkylarylenyl, heteroaryl, heteroaryl-C_{1-10} alkylenyl, heteroaryloxy-C_{1-10} alkylenyl,

C_{1-10} alkylheteroarylenyl, heterocyclyl, and heterocyclyl-C_{1-10} alkylenyl substituted by one or more substituents independently selected from the group consisting of C_{1-10} alkyl, C_{1-10} alkoxy, hydroxy-C_{1-10} alkyl, halo-C_{1-10} alkyl, halo-C_{1-10} alkoxy, halogen, nitro, hydroxy, cyano, aryl, aryloxy, heteroaryl, heteroaryloxy, heterocyclyl, amino, C_{1-10} alkylamino, di(C_{1-10} alkyl)amino, and in the case of C_{1-10} alkyl, C_{2-10} alkenyl, C_{2-10} alkynyl, and heterocyclyl, oxo; wherein heteroaryl, C_{1-10} alkylheteroarylenyl, and heterocyclyl are attached to Z through a carbon atom;

R_A is selected from the group consisting of:

halogen,

hydroxy,

alkyl,

alkenyl,

haloalkyl,

alkoxy,

alkylthio, and

$-N(R_9)_2$;

n is 0 to 4;

R_2 is selected from the group consisting of

$-R_4$,

$-X-R_4$,

$-X-Y-R_4$, and

$-X-R_5$;

X is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclylene wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated with arylene, heteroarylene, or heterocyclylene, and optionally interrupted by one or more -O- groups;

Y is selected from the group consisting of:

$-S(O)_{0-2}-$

$-S(O)_2-N(R_8)-$,

$-C(R_6)-$,

$-C(R_6)-O-$,

$-O-C(R_6)-$,

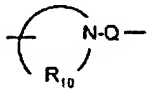
$-O-C(O)-O-$,

$-N(R_8)-Q-$,

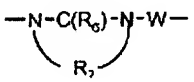
$-C(R_6)-N(R_8)-$,

$-O-C(R_6)-N(R_8)-$,

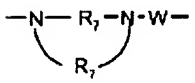
$-C(R_6)-N(OR_9)-$,



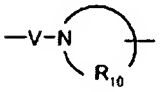
,



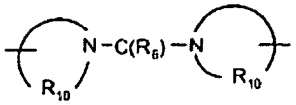
,



,



, and

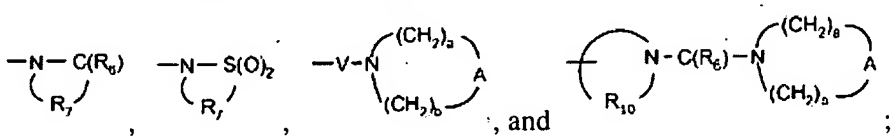


;

R_4 is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl,

aryloxy, arylalkyleneoxy, heteroaryl, heteroaryloxy, heteroarylalkyleneoxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkyleneoxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

R_5 is selected from the group consisting of:



R_6 is selected from the group consisting of =O and =S;

R_7 is C_{2-7} alkylene;

R_8 is selected from the group consisting of hydrogen, alkyl, alkoxyalkylenyl, and arylalkylenyl;

R_9 is selected from the group consisting of hydrogen and alkyl;

R_{10} is C_{3-8} alkylene;

A is selected from the group consisting of -O-, -C(O)-, $-S(O)_{0-2}-$, $-CH_2-$, and $-N(R_4)-$;

Q is selected from the group consisting of a bond, $-C(R_6)-$, $-C(R_6)-C(R_6)-$, $-S(O)_2-$, $-C(R_6)-N(R_8)-W-$, $-S(O)_2-N(R_8)-$, $-C(R_6)-O-$, and $-C(R_6)-N(OR_9)-$;

V is selected from the group consisting of $-C(R_6)-$, $-O-C(R_6)-$, $-N(R_8)-C(R_6)-$, and $-S(O)_2-$;

W is selected from the group consisting of a bond, -C(O)-, and $-S(O)_2-$; and

a and b are independently integers from 1 to 6 with the proviso that $a + b \leq 7$; or a pharmaceutically acceptable salt thereof.

9-11. **(Canceled)**

12. **(Previously Presented)** The compound or salt of claim 4 wherein n is 0.

13-14. **(Canceled)**

15. **(Previously presented)** The compound or salt of claim 2 wherein R_2 is hydrogen, alkyl, hydroxyalkylenyl, or alkoxyalkylenyl.

16. **(Original)** The compound or salt of claim 15 wherein R_2 is hydrogen, methyl, ethyl, propyl, butyl, 2-hydroxyethyl, hydroxymethyl, 2-methoxyethyl, or ethoxymethyl.

17. **(Canceled)**

18. **(Previously presented)** The compound or salt of claim 2 wherein Z is $-S(O)_2-$.

19. **(Previously presented)** The compound or salt of claim 2 wherein Z is -S(O)-.

20. **(Previously presented)** The compound or salt of claim 2 wherein Z is -S-.

21. **(Previously presented)** The compound or salt of claim 2 wherein R_1 is linear or branched C_{1-4} alkyl, aryl, or 5 to 10 membered heteroaryl containing one or two heteroatoms, wherein the alkyl, aryl, or heteroaryl group may be unsubstituted or substituted with one or more substituents.

22. **(Previously presented)** The compound or salt of claim 21 wherein R_1 is methyl, ethyl, 1-propyl, 2-propyl, 2-methylpropyl, 2-hydroxy-2-methylpropyl, phenyl, -4-chlorophenyl, or 4-fluorophenyl.

23. **(Previously presented)** The compound or salt of claim 2 wherein X_{1-1} and X_{1-2} are independently selected from C_{2-7} alkylene groups.

24. **(Original)** The compound or salt of claim 23 wherein X_{1-1} is $-(CH_2)_{2-4}-$, $-CH_2-C(CH_3)_2-$, or $-CH_2-\text{cyclic}(CH_2)_{3-6}-$.

25. **(Previously presented)** The compound or salt of claim 24 wherein X_{1-2} is $-(CH_2)_2-$ or $-(CH_2)_3-$.

26. **(Previously presented)** A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 2 in combination with a pharmaceutically acceptable carrier.

27. **(Previously presented)** A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 2 to the animal.

28-40. **(Canceled)**.

41. **(Previously presented)** The compound or salt of claim 4 wherein R_2 is hydrogen, alkyl, hydroxyalkylenyl, or alkoxyalkylenyl.

42. **(Previously presented)** The compound or salt of claim 41 wherein R_2 is hydrogen, methyl, ethyl, propyl, butyl, 2-hydroxyethyl, hydroxymethyl, 2-methoxyethyl, or ethoxymethyl.

43. **(Previously presented)** The compound or salt of claim 4 wherein Z is $-S(O)_2-$.

44. **(Previously presented)** The compound or salt of claim 4 wherein R_1 is linear or branched C_{1-4} alkyl, aryl, or 5 to 10 membered heteroaryl containing one or two heteroatoms, wherein the alkyl, aryl, or heteroaryl group may be unsubstituted or substituted with one or more substituents.

45. **(Previously presented)** The compound or salt of claim 44 wherein R_1 is methyl, ethyl, 1-propyl, 2-propyl, 2-methylpropyl, 2-hydroxy-2-methylpropyl, phenyl, 4-chlorophenyl, or 4-fluorophenyl.

46. **(Previously presented)** The compound or salt of claim 4 wherein X_{1-1} and X_{1-2} are independently selected from C_{2-7} alkylene groups.

47. **(Previously presented)** The compound or salt of claim 46 wherein X_{1-1} is $-(CH_2)_{2-4}-$, $-CH_2-C(CH_3)_2-$, or $-CH_2-\text{cyclic}(CH_2)_{3-6}-$.

48. **(Previously presented)** The compound or salt of claim 47 wherein X_{1-2} is $-(CH_2)_2-$ or $-(CH_2)_3-$.

49. **(Previously presented)** The compound or salt of claim 7 wherein n is 0.

50. **(Previously presented)** The compound or salt of claim 7 wherein R_2 is hydrogen, alkyl, hydroxyalkylenyl, or alkoxyalkylenyl.

51. **(Previously presented)** The compound or salt of claim 50 wherein R_2 is hydrogen, methyl, ethyl, propyl, butyl, 2-hydroxyethyl, hydroxymethyl, 2-methoxyethyl, or ethoxymethyl.

52. **(Previously presented)** The compound or salt of claim 7 wherein Z is $-S(O)_2-$.

53. **(Previously presented)** The compound or salt of claim 7 wherein R_1 is linear or branched C_{1-4} alkyl, aryl, or 5 to 10 membered heteroaryl containing one or two heteroatoms, wherein the alkyl, aryl, or heteroaryl group may be unsubstituted or substituted with one or more substituents.

54. **(Previously presented)** The compound or salt of claim 53 wherein R_1 is methyl, ethyl, 1-propyl, 2-propyl, 2-methylpropyl, 2-hydroxy-2-methylpropyl, phenyl, 4-chlorophenyl, or 4-fluorophenyl.

55. **(Previously presented)** The compound or salt of claim 7 wherein X_{1-1} and X_{1-2} are independently selected from C_{2-7} alkylene groups.

56. **(Previously presented)** The compound or salt of claim 55 wherein X_{1-1} is $-(CH_2)_{2-4}-$, $-CH_2-C(CH_3)_2-$, or $-CH_2-cyclic(CH_2)_{3-6}-$.

57. **(Previously presented)** The compound or salt of claim 56 wherein X_{1-2} is $-(CH_2)_2-$ or $-(CH_2)_3-$.

58-65. **(Canceled)**

66. **(Previously presented)** A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 4 in combination with a pharmaceutically acceptable carrier.

67. **(Previously presented)** A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 4 to the animal.

68. **(Previously presented)** A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 7 in combination with a pharmaceutically acceptable carrier.

69. **(Previously presented)** A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 7 to the animal.

70-71. **(Canceled)**